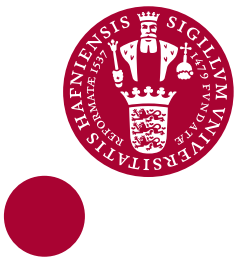

General Practitioners' Barriers Toward Medication Reviews in Polymedicated Multimorbid Patients

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General Practitioners' Barriers Toward Medication Reviews in Polymedicated Multimorbid Patients: How can a Focus on the Pharmacotherapy in an Outpatient Clinic Support GPs?

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Abstract

Purpose: The aim of this study was to explore whether general practitioners (GPs) experienced barriers toward medication reviews in polymedicated, multimorbid patients, and how a clinical pharmacologist with a focus on pharmacotherapy can support the GPs in an outpatient clinic.

Design: The study was descriptive and exploratory and had a qualitative design with a phenomenological/hermeneutic orientation for the interviews.

Participants: The study comprised 14 interviews with 14 different GPs from the Capital Region of Denmark.

Results: Three themes emerged from the interviews: (1) The care of patients With polypharmacy is challenged by the lack of professional dialogue and collaboration between GPs and hospital-based clinical pharmacologists, (2) the relationship between the patients with polypharmacy and the GP is characterized by care and individual considerations, and (3) the culture encourages adding medication and inhibits dialogue about medication withdrawal even for patients with polypharmacy.

Conclusion and implications for practice: This study found that the primary barriers toward multimorbid patients with polypharmacy were the need for communication and teamwork with specialists (cardiologists, neurologists, endocrinologists, etc). Often, GPs felt that the specialists at the hospitals were more concerned about following standards and guidelines regarding specific diseases instead of a more holistic patient approach. To improve management of polypharmacy patients, the GPs suggest that a joint force is necessary, a partner-like relationship with greater transparency regarding information transfer, feedback, and shared decision-making, but also more education in the pharmacological field is essential.

Keywords

qualitative study, general practitioners, polypharmacy, medication review, deprescribing, withdrawal, discontinuation

Background

Due to increasing longevity and widening diagnostic boundaries, the prevalence of people with more than one chronic disease (ie, multimorbidity) is increasing.[1,2] As the array of pharmacologic treatments is also expanding, most multimorbid patients are treated with polypharmacy, which can be defined as the concomitant use of more than 2 drugs—often arbitrarily set at a cutoff value of 5 or more.[1,3] Polypharmacy is frequent among elderly patients and is often associated with negative health outcomes, greater economic burden, increased risk of

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hospital admissions, and mortality.[4-6] Polymedicated elderly patients are often treated with inappropriate medication. Therefore, there is a great deal to gain from systematically performing critical reviews of multimorbid elderly patients' medication. Ideally, a medication review that is carried out in collaboration between a clinical pharmacologist, a physician, and the patient could be beneficial for the elderly patient.[4,7]

Often, multimorbid, polymedicated patients attend multiple outpatient clinics and are treated by several different specialists.[2] Patients' medications are often changed during visits to the outpatient clinics and during hospital stay.[8] In the Scandinavian countries, it is primarily the general practitioner (GP) who renews the prescriptions for the patients. The Danish health-care system provides free access to all health-care services, including GPs, hospitals, and outpatient clinics. Furthermore, it provides partial compensation for prescribed medications in order to ensure equal access to health services for all citizens.[9,10] This necessitates a close dialogue between the primary and the secondary sectors—one which is often lacking in the current system.[1,2] Lack of communication may result in negative health outcomes for the patients: physicians and nurses may overlook adverse drug reactions and interactions due to lack of knowledge of the patients' combined medication.[1,3]

During recent years, there has been an increased focus on how health-care systems can benefit from improving cross-sectoral collaboration, and how different concepts can be integrated in order to improve health outcomes and create a more effective use of health services and, at the same time, be economically cost effective.[11,12] Studies have shown that, through a well-organized, cross-sectoral collaboration, it is possible to establish more rewarding teamwork that can improve the quality of treatments and ultimately benefit the patients.[1,13] In the Scandinavian countries, the GPs function as gatekeepers to the more specialized part of the health-care system, and they are the primarily responsible persons for prescribing the ongoing medical therapy. As such, they should have a full overview of the patients' diseases, family history, and medication.

Due to the increased prevalence of polymedicated patients, the complexity of multiple diseases and their combinations, sector transitions, and the financial framework for the public health-care system, it is essential that the challenges are highlighted from a variety of perspectives. By focusing on the GPs, we aim to gain knowledge about which quality improvements are needed to ensure better and more effective treatment of polymedicated, multimorbid patients.

The aim of this study was to explore whether GPs experienced barriers toward medication reviews in polymedicated, multimorbid patients, and how a dedicated clinical pharmacologist with a focus on pharmacotherapy could support the GPs in an outpatient clinic.

Methods

The study was descriptive and explorative in nature and had a qualitative design with a phenomenological/hermeneutic orientation.[14] We performed in-depth, face-to-face interviews to capture the individual's point of view, as each participant experienced it, and to avoid influence by other participants.

The study was performed and reported according to the consolidated criteria for reporting qualitative research (COREQ) guidelines to describe important aspects of the research and ensure reliability of the results.[15]

Participants

Participants were GPs from the Capital Region of Denmark. The participants were recruited from 2 groups: an intervention group and a nonintervention group. Participants in the intervention group consisted of GPs with one or more patients who had received a systematic medication review in the newly established polypharmacy outpatient clinic (a collaborative effort between the Department of Clinical Pharmacology and the Department of Geriatrics). This intervention entailed a systematic medication review that was undertaken with the patient's GP before medication changes were effectuated in collaboration with the patient in the polypharmacy outpatient clinic. All interviews were performed during a 10-week period. The GPs from both the intervention group and the usual care group were contacted by phone. Sampling was promoted through purposive sampling. Data saturation was reached when no new themes emerged from the interviews.

Data Collection

The individual in-depth interviews were conducted at each GP's clinic in undisturbed surroundings. A semistructured interview guide with open-ended questions was used. The semistructured interview guide was based on the following themes: (a) what barriers do GPs experience concerning polypharmacy patients and optimisation of their medication and (b) collaboration and communication between GPs and the physician at the hospital and the possible need for support from a clinical pharmacologist with focus on pharmacotherapy. The interviews were conducted by the first author (J.L.). The interviews lasted approximately 30 minutes or until the topic was covered to the satisfaction of the participant and the interviewer. The interviews were audio-taped and transcribed verbatim.

Data Analysis

Content analysis was used to analyze the transcribed data. Content analysis was chosen because it offers the authors a flexible method for developing and extending knowledge of the participants' narratives.[16] Two authors (J.L. and C.B.) analyzed the data according to the content analysis.[16] The analysis of the data was conducted in 2 parallel processes. The 2 authors met to discuss their findings and agreed on the final themes. The process was a back-and-forth reading of the text to condense the data into different meaning units. These units were then divided into subthemes. The subthemes were discussed

until consensus was reached on the different themes by the 2 authors.[16]

Ethical Consideration

Participants were given information regarding the study, both orally and in writing. They would provide a full oral and written informed consent. Data were anonymized. The study was approved by the Danish Data Protection Agency (2012-58-0004). According to Danish law, ethical committee approval is not needed for this type of study.

Findings

A total of 16 GPs were invited to participate of which 2 declined due to clinical obligations. Consequently, 14 GPs, 7 women with an average seniority (since specialization) of 15 years, median 14 years, participated in the study. Nine of the GPs were in the intervention group. Three themes were identified during the data analysis: (1) the treatment of patients with polypharmacy is challenged by the lack of cross-sectoral professional dialogue and collaboration with clinical pharmacologists; (2) the relationship between the patients with polypharmacy and the GP is characterized by care and individual considerations; and (3) the culture encourages further medication and inhibits dialogue about drug withdrawal for patients with polypharmacy.

Theme 1: The Care of Patients With Polypharmacy is Challenged by the Lack of Professional Dialogue and Collaboration Between GPs and Hospital-Based Clinical Pharmacologists

The GPs often felt that they were on their own when dealing with the patients' medication and that they were not able to get in contact with the specialists at the hospitals. In most cases, when a GP tried to contact a specialist at the hospital to discuss a patient's treatment, it was not possible to reach them, and it was not uncommon that the youngest physician with limited experience would answer the phone.

They often felt that there was a lack of teamwork between sectors, which, for them, could only be seen as a frustrating absence of dialogue with the specialists. The GPs describe themselves as generalists and the physicians at the hospitals as specialists; often, the GPs needed to discuss the patient's treatment because they did not feel they had the knowledge or skills to make correct therapeutic decisions. As one GP stated, "A specialized treatment belongs at the hospital, where the specialist can use their expertise."

The GPs often stated that they, as generalists, considered all aspects of the patient. The GPs stated that patient-oriented care (and not focusing only on disease) was very rare for the specialist at the hospital. The GPs indicated that the specialist's only focus was to follow standards and guidelines and that they did not consider the patient's age, competing diseases, contraindications and interactions due to polypharmacy, and so on when planning the treatment. One GP claimed, "Guidelines can only say so much about the disease and nothing about the whole patient."

When asked about barriers to medication withdrawal, the GPs felt that they lacked the knowledge of how the drugs interacted when there were more than 1 drug and that it was their job to ensure the medication list was as accurate and up to date as possible. It was clear that the GPs felt it was difficult to discontinue medication that a specialist at the hospital had prescribed. They were worried it would seem as if they did not acknowledge the specialist's work, and they knew that it would be recommenced again at the next appointment in the outpatient clinic. It was described as "If the medicine has been changed at the hospital, without you knowing why, it creates uncertainty, because it may be medicine that I think is necessary for the patient. Some specialists at the hospital only focus on one illness, regardless of how it will transmit when the patient gets home."

In some cases, the GPs found that the treatment was becoming increasingly specialized and that even the specialist had difficulties deciding the right treatment, and it was therefore often the GPs ended up deciding anyway. The GPs wanted a dialogue with the specialist, and, if the theme was a medication review, a clinical pharmacologist (clinical pharmacology is a medical specialty in Denmark) was preferable. It did not necessarily have to be in an outpatient clinic, but specialized support was necessary.

The GPs found that there were discrepancies between the systems in the different sectors and that they were not properly informed about the changes made at the hospital. The ability to communicate and enter into a dialogue with a specialist about the patient was of very high priority. It was stated as: "Often we are not informed about the changes. It is us, the GPs, that must try and figure it all out, that isn't easy."

It was clear during the interviews that the GPs with the largest number of multimorbid, polypharmacy patients were also the most challenged by the lack of communication and dialogue between sectors and specialists. However, all GPs expressed a need for dialogue with a specialist. The GPs with the largest number of patients with polypharmacy were also the ones who described the cross-sectoral teamwork as the most challenging.

Some of the participants wanted to have action cards, developed by clinical pharmacologists with a focus on pharmacotherapy, as a go-to list when they needed support during discontinuation of medicine and when reviewing contraindications—some sort of an easy-access guideline. They also argued for more education in more specific matters such as contraindications. There were no key differences between groups (intervention and non-intervention) in our findings. The intervention group was very positive regarding the medication reviews at the outpatient clinic, whereas the nonintervention group would have liked some kind of support by a clinical pharmacologist for their multimorbid polymedicated patients. There were only 2 GPs who did not see the need for this kind of support, namely, the GPs with the fewest multimorbid patients

and the ones who already felt they had a rewarding collaboration with the specialist and clinical pharmacologist at the hospitals.

Theme 2: The Relationship Between Patients With Polypharmacy and GP is Characterized by Care and Individual Considerations

The GPs often perceived the relationship with their patients as caring and trusting. The GPs prioritized the relationship with patients and often described their concern toward their situation. The GPs often had a good knowledge of their patients and their situation, they had often known the patients for several years, and they knew their family and their situation in general. This could be described as a barrier towards discontinuation of medicine, despite the fact that the recommendations dictate that they should be discontinued. One GP described it as: "The fact that we have a personal relationship with our patients plays a part when we discontinue medicine, especially when taking sleeping pills and benzodiazepines, it is obvious that it does, it's difficult."

The GPs describe a multimorbid, polymedicated patient as an elderly patient with the same medication for many years, and a patient who often finds great reassurance and comfort in continuation of the usual amount of pills. Furthermore, the patients did not always understand the GPs' argument when they try to discontinue some of their medication. The GPs felt that they did not get anywhere and often had to postpone the withdrawal. The GPs therefore argued that an external specialist such as a clinical pharmacologist with focus on pharmacotherapy may in some cases have greater success when changing the list of prescriptions.

> And if we've been talking to a patient for the past 3 years about stopping a drug and they just think, 'It's just a stupid idea my doctor has,' but then if the clinical pharmacologist agrees and explains it, they may appear more willing. But it requires a dialogue. It could be by phone, in written, or personal meetings. In the optimal world, it would be perfect if the specialist could be more integrated in our daily work.

The GPs would, in some cases, even discontinue or continue drugs that had been prescribed or deprescribed by a specialist, even if the guidelines said otherwise. The argument was that many studies do not include elderly, multimorbid patients, and therefore there is no evidence that the drug has any effect on these patients. As one GP argued:

> You know what, when you are 85 years old you don't have to perform anymore and at the same time there is this 'time to effect', that means, it takes more than 10 years before a patient at 85 is getting a marginal effect, marginal!

The GPs' consideration for the patient's well-being was of great concern. The GPs argued that, in some cases, it seemed as if patients were poisoned, because each specialist followed their own standards without noticing all other illnesses or the patients' general health. One GP described it as: "You sometimes find that they have become over-medicated, but according to the various guidelines, you just have to do it. You can't really treat people like that, right?"

Theme 3: The Culture Encourages Further Medication and Inhibits Dialogue About Medication Withdrawal Even for Patients With Polypharmacy

The GPs felt that the medical profession in general is becoming increasingly specialized and that each hospital-based specialist only followed guidelines within their specific area and did not consider other perspectives or illnesses when it came to medication. The GPs felt that the organizational structure was ineffective; it did not allow time for dialogue or a way for them to communicate about the multimorbid patients. Often, when the patients experienced side effects due to a combination of drugs, the problem had to be solved by the GPs. The GPs felt responsible for something that they alone could not change. It was described as:

> "There are so many stakeholders and so many with their own agendas, which can change the rhythm. So, I think communication is always what turns out to be the best, but it must be cross-sectoral. You need to be able to join forces more freely, getting hold of the different stakeholders that are involved with the patient. I often experience that it can be difficult."

Often, GPs felt that the specialist at the hospital only added more drugs to the patient's medication list and they did not consider whether the patient would actually obtain any benefit from the extra medication or reflect on interactions and cumulative adverse events due to the long medication list. One GP stated:

> "Each hospital contact is only adding more drugs to the list."

The GPs often described the organization of cross-sectoral cooperation when treating multimorbid patients with polypharmacy as cumbersome and sluggish. They described that the communication between sectors was slow and inadequate; it could take weeks before they received any correspondence about a patients' medication. One GP expressed it as: "This is a huge barrier, not being able to get hold of the different stakeholders involved with the patient. I often experience that it can be difficult. You need to be able to work more freely across sectors and not be so limited." Two GPs experienced fewer barriers due to the fact that the communication flowed more easily between sectors in their area; they did not meet the same obstructions when calling the specialists at the hospitals, they expressed it as: "It's crucial that I can get a hold on the specialist, so I just have all the medical specialties on speed dial." However, all GPs expressed that easy access to a specialist at the hospitals would facilitate better teamwork. When asked about the polypharmacy clinic, the GPs were divided; they all welcomed the initiative of having the support of a clinical pharmacologist with focus on pharmacotherapy when optimizing the medication, but some of them would have preferred that the dialogue was at the GPs' clinic and not at another outpatient

clinic. They were concerned that the dialogue would fade or be weakened and that this would not break down the barriers between sectors.

Because of the way the cross-sectoral collaboration is organized, the GPs felt that the health-care culture endorsed more medication instead of less and that it was easier and less time consuming to continue medication prescribed by the specialists at the hospitals.

Discussion

The present study investigated GPs' barriers toward medication reviews in multimorbid, polymedicated patients and whether a clinical pharmacologist with focus on pharmacotherapy in an outpatient clinic can support the GPs' work with these patients. The ultimate goal was to identify areas where medical treatment of multimorbid, polymedicated patients could be improved. When GPs were asked about the medication review process made, it was clear that they experienced barriers toward deprescribing. The GPs often described that it was their responsibility to keep track of the patient's medication list, regardless of how specialized the treatment was.

In this study, there was clearly an agreement among the GPs about the different aspects that influenced the discontinuation of drugs. The GPs felt that the fact that they knew their patients well, and that, in some cases, knowledge had an impact on their decisions when discontinuing medicine. In some cases, the GPs felt ambiguity toward the discontinuation of certain drugs in multimorbid patients. For the GPs, it was always an evaluation of the patient's resources in relation to what they could manage regarding decisions about discontinuing drugs. It was important for the GPs to make sure that the patients would not be overwhelmed and felt pushed away. Previous studies have found that GPs address patient issues and insecurity toward decision-making when it comes to discontinuing drugs.[17] One study described 4 important aspects when GPs' prescriptions seemed inappropriate: (a) the need to please the patients, (b) a feeling of being forced, (c) tension between experience and guidelines, and (d) fear of prescribing.[18] The need to please the patient was often linked to the statement "the path of least resistance" and that it was much quicker and easier to just prescribe what the patient wanted. In some ways, this was similar to what the GPs said in these interviews: The need to please the patient was linked to the path of lesser resistance. However, there is also an aspect of general care and a desire to do what is best for the patient regardless of instructions and guidelines; the GPs saw themselves as having a closer and more holistic approach compared to the specialist at the hospital. To care for others is fundamental and is often a basic condition and a basis of treating patients.[19] The gap between the real world and the ideal treatment and the sense of doing good or harm will often be challenging for the GPs. It has been shown that empathy from health professionals is vital for the patients, and GPs that do not show support and compassion will affect the patients negatively, often leaving them anxious and powerless.[20,21]

Various drugs are given at different times in the patients' lives, often by a growing number of specialists, who prescribe medications for specific problems in their field of expertise.[22] Many GPs felt reluctant to change decisions made by specialists.[22] Almost all clinical trials focus on testing the addition of new medicine, and there are very few trials focusing on reviewing medication lists or reducing or stopping medicines.[23] Another argument was that very few studies include older patients with comorbidity, and therefore there is no definitive evidence of the effect and harm of the treatment.[24,25] The GPs argued that, for 85-year-old patients with polypharmacy, more drugs would likely have a poorer effect, or the time to effect would not be before the patient had already died. This is also supported by other studies, where it has been argued that new studies on drug effect must provide better information about the recruitment process and that more attention should be paid to the overall test results being more representative to the broader population.[24,25]

Taken together, the interviews revealed a general understanding that—regardless of the various barriers—it was desirable and feasible to decrease the medication burden for elderly patients with polypharmacy. A general standpoint was that the GPs, as generalists, did not feel they had the necessary knowledge or backup from hospital-based specialists to conduct critical medication reviews, and this highlighted the need for better cross-sectoral collaboration as well as greater education. It was clear through the interviews that GPs were interested in the support from a clinical pharmacologist with focus on pharmacotherapy when discontinuing medication. An important statement was that the GPs felt a need for more dialogue and a better teamwork across sectors for the benefit of the patient. These statements are in line with a study on factors influencing deprescribing; in this study, they argued for more education but also highlighted the need for better conditions and better cooperation between sectors.[12,26]

Limitations of the Study

We performed the study according to accepted principles for in-depth interviews and design. The results were reported according to the COREQ guidelines.[15] The generalizability of this study is limited by the fact that only Danish GPs were interviewed, and the findings might only be applicable for Denmark or other countries with similar health-care systems, for example, Scandinavian countries. The fact that the interviews were related to a specific intervention (polypharmacy outpatient clinic manned with clinical pharmacologists) may have affected the GPs' statements. However, this was the reason for including GPs that had not received the intervention.

Conclusion and Implications for Practice

In conclusion, we found that the barriers toward multimorbid patients with polypharmacy were primarily related to the lack of relevant communication between sectors, and also the fact that GPs felt a great deal of empathy with their patients, which,

in some cases, could influence a medication review process, and they suggested that a hospital-based specialist with a focus on clinical pharmacology might relevantly support this process. Often, GPs felt that the specialists at the hospitals were more concerned with following guidelines and instructions regarding the specific diseases, instead of considering the whole patient. Many of the GPs experienced that the culture encourages further prescriptions and inhibits cross-sectional dialogue; this is an argument for the continued development of interventions, where the specialist and the generalist work closer together.

Declaration of Conflicting Interests

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